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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,778	06/14/2001	Steve Jerman	10002156-1	7976

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

TZENG, FRED

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 04/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,778

Applicant(s)

JERMAN, STEVE

Examiner

Fred Tzeng

Art Unit

2651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3,5-11,17 and 18 is/are rejected.
7) ☒ Claim(s) 2, 4, 12-16, 19-21 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 14 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2&3.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are presented for examination.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

3. Claim 4 recites the limitation "...the set of label data..." in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5-11, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozue et al (USPN 5,867,335) hereafter referred to as Ozue in view of Dodt et al (USPN 5,487,171) hereafter Dodt.

Regarding claim 1, Ozue discloses the invention substantially as claimed. Ozue discloses a method of data storage (see column 4 lines 38-39, i.e., the cartridge storage 10) employing a tape cartridge (see column 5 lines 9-11, i.e., the magnetic tape cartridge 50) having a cartridge memory (see column 5 lines 11-13, i.e., the IC memory 51) for retaining informative data of the magnetic tape 52 (see column 5 lines 11-17), comprising: storing informative data, such as ID for identifying the magnetic tape cartridge 50, a cell number indicating the storage cell 11, and an variable N in the cartridge IC memory 51 (see column 5 lines 15-17); and determining if the informative data in the IC memory needs to be updated and updating it accordingly (see column 4 lines 50-59).

However, Ozue does not disclose using a cartridge stamp in the cartridge memory for labeling or recording the load activity of the tape cartridge.

Dodt teaches a system for reading and stopping reading data from magnetic tape into memory (see title and abstract) employing date/time stamps to record load activity of the tape cartridge 301 (see column 5 lines 56-63).

Ozue and Dodt are combinable because they are from the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Dodt's date/time stamps for tape cartridge load activity recording into Ozue's autochanger system in order to provide a faster autochanger capable of conducting loading and unloading of tape cartridges. Because Dodt's date/time stamps can provide a quicker reference of a tape cartridge's loading activity to a system controller than a control memory does.

Regarding claim 3, Ozue discloses the invention substantially as claimed. Ozue discloses a method of data storage (see column 4 lines 38-39, i.e., the cartridge storage 10) employing a tape cartridge (see column 5 lines 9-11, i.e., the magnetic tape cartridge 50) having a cartridge memory (see column 5 lines 11-13, i.e., the IC memory 51) for retaining a set of label data (see column 5 lines 11-17), comprising: storing label data, such as ID for identifying the magnetic tape cartridge 50, a cell number indicating the storage cell 11, and an variable N in the cartridge IC memory 51 (see column 5 lines 15-17); and determining if the label data in the IC memory needs to be updated and updating it accordingly (see column 4 lines 50-59).

However, Ozue does not disclose updating the set of label data stored in the cartridge memory and updating the cartridge stamp in response to updating the set of label data.

Dodt teaches a system for reading and stopping reading data from magnetic tape into memory (see title and abstract) employing date/time stamps to record load activity of the tape cartridge 301 (see column 5 lines 56-63) and updating the time/data stamp stored in the tape memory in response to updating the set of label data (see column 4 lines 44, 51-59).

Ozue and Dodt are combinable because they are from the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Dodt's date/time stamps for tape cartridge load activity recording and updating the time/data stamp stored in the tape memory in response to updating the set of label data (see column 4 lines 44, 51-59) into Ozue's

autochanger system in order to provide a faster autochanger capable of conducting loading and unloading of tape cartridges with higher accuracy. Because Dodt's date/time stamps can provide a quicker and faster reference of a tape cartridge's loading activity to a system controller than a control memory does.

Regarding claim 5, Dodt discloses that the cartridge stamp comprises a real-time stamp (see column 4 line 44).

Regarding claim 6, Dodt discloses that the cartridge stamp comprises a randomly selected character (see column 5 line 63, i.e., the date/time stamp comprising of randomly selected letters and numbers for displaying date and time).

Regarding claim 7, Dodt discloses that the cartridge stamp comprises a sequentially selected character (see column 5 lines 63, i.e., the date/time stamp comprising of sequentially selected letters and numbers for displaying date and time).

Regarding claim 8, Ozue discloses the invention substantially as claimed. Ozue discloses a method of data storage (see column 4 lines 38-39, i.e., the cartridge storage 10) employing a tape cartridge (see column 5 lines 9-11, i.e., the magnetic tape cartridge 50) which has a length of tape with a set of general data stored thereon (see column 5 lines 10-11, i.e., the magnetic tape 52 stored with a set of general data thereon), and which has a cartridge memory (see column 5 lines 11-13, i.e., the cartridge IC memory 51), comprising: updating the set of general data (see column 5 lines 44-47 and column 6 lines 41-45, 52-58); and storing informative data, such as ID for identifying the magnetic tape cartridge 50, a cell number indicating the storage cell 11, and an variable N in the cartridge IC memory 51 (see column 5 lines 15-17); and

determining if the informative data in the IC memory needs to be updated and updating it accordingly (see column 4 lines 50-59).

However, Ozue does not disclose using a cartridge stamp in the cartridge memory for labeling or recording the load activity of the tape cartridge and updating the cartridge stamp as a result of updating the set of general data.

Dodt teaches a system for reading and stopping reading data from magnetic tape into memory (see title and abstract) employing date/time stamps to record load activity of the tape cartridge 301 (see column 5 lines 56-63) and updating the time/data stamp of magnetic tape cartridge 301 each time after the magnetic tape 100 being loaded for reading or writing (see column 4 lines 44, 51-59).

Ozue and Dodt are combinable because they are from the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Dodt's date/time stamps for tape cartridge load activity recording and updating the time/data stamp of magnetic tape cartridge 301 each time after the magnetic tape 100 being loaded for reading or writing (see column 4 lines 44, 51-59) into Ozue's autochanger system in order to provide a faster autochanger capable of conducting loading and unloading of tape cartridges with higher accuracy. Because Dodt's date/time stamps can provide a quicker and faster reference of a tape cartridge's loading activity to a system controller than a control memory does.

Regarding claim 9, Ozue discloses storing a set of label data in the cartridge memory and updating the set of label data as result of updating the set of general data (see column 4 lines 50-59).

Regarding claim 10, Ozue discloses the invention substantially as claimed. Ozue discloses a method of data storage (see column 4 lines 38-39, i.e., the cartridge storage 10) employing a tape cartridge (see column 5 lines 9-11, i.e., the magnetic tape cartridge 50) which has a cartridge memory with a set of label data stored therein (see column 5 lines 11-13, i.e., the cartridge IC memory 51), and which has a length of tape with a set of general data stored thereon (see column 5 lines 10-11, i.e., the magnetic tape 52 stored with a set of general data thereon), the method, comprising: replacing the set of label data stored in the cartridge memory with an updated set of label data (see column 4 lines 50-59).

However, Ozue does not disclose storing a cartridge stamp in the cartridge memory and replacing the cartridge stamp stored in the cartridge memory with an updated cartridge stamp in response to replacing the set of label data.

Dodt teaches a system for reading and stopping reading data from magnetic tape into memory (see title and abstract) employing date/time stamps to record load activity of the tape cartridge 301 (see column 5 lines 56-63) and replacing or updating the cartridge stamp stored in the cartridge memory with an updated cartridge stamp in response to replacing the set of label data (see column 4 lines 44, 51-59).

Ozue and Dodt are combinable because they are from the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Dodt's date/time stamps for tape cartridge load activity recording and replacing or updating the cartridge stamp stored in the cartridge memory with an updated cartridge stamp in response to replacing the set of label data

(see column 4 lines 44, 51-59) into Ozue's autochanger system in order to provide a faster autochanger capable of conducting loading and unloading of tape cartridges with higher accuracy. Because Dodt's date/time stamps can provide a quicker and faster reference of a tape cartridge's loading activity to a system controller than a control memory does.

Regarding claim 11, Dodt discloses providing a reader memory (see column 2 lines 20-24, i.e., the preload buffer) and storing the cartridge stamps in the reader memory (see column 2 lines 20-24 and column 4 lines 44, 51-59).

Regarding claim 17, Ozue discloses the invention substantially as claimed. Ozue discloses a data storage apparatus (see column 4 lines 38-39, i.e., the cartridge storage 10) comprising a tape cartridge (see column 5 lines 9-11, i.e., the magnetic tape cartridge 50) having a cartridge memory (see column 5 lines 11-13, i.e., the IC memory 51).

However, Ozue does not disclose configuring the cartridge memory for storing therein a cartridge stamp.

Dodt teaches a system for reading and stopping reading data from magnetic tape into memory (see title and abstract) employing date/time stamps to record load activity of the tape cartridge 301 (see column 5 lines 56-63).

Ozue and Dodt are combinable because they are from the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Dodt's date/time stamps for tape cartridge load activity recording into Ozue's autochanger system in order to provide a faster

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autochanger capable of conducting loading and unloading of tape cartridges. Because Dodt's date/time stamps can provide a quicker and faster reference of a tape cartridge's loading activity to a system controller than a control memory does.

Regarding claim 18, Ozue discloses the invention substantially as claimed. Ozue discloses a first controller (see column 4 line 50-51, i.e., the system controller), wherein the cartridge memory is further configured to store therein a set of label data (see column 5 lines 11-17) and the first controller is configured to execute a sequence of computer-executable steps to update the set of label data (see column 4 lines 50-59).

However, Ozue does not disclose updating the cartridge stamp in response to updating the set of label data.

Dodt teaches a system for reading and stopping reading data from magnetic tape into memory (see title and abstract) employing date/time stamps to record load activity of the tape cartridge 301 (see column 5 lines 56-63) and updating the time/data stamp of magnetic tape cartridge 301 each time after the magnetic tape 100 being loaded for reading or updating (see column 4 lines 44, 51-59).

Ozue and Dodt are combinable because they are from the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate Dodt's date/time stamps for tape cartridge load activity recording and updating the time/data stamp of magnetic tape cartridge 301 each time after the magnetic tape 100 being loaded for reading or updating (see column 4 lines 44, 51-59) into Ozue's autochanger system in order to provide a faster autochanger capable of conducting loading and unloading of tape cartridges with higher

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accuracy. Because Dodt's date/time stamps can provide a quicker and faster reference of a tape cartridge's loading activity to a system controller than a control memory does.

Allowable Subject Matter

6. Claims 2, 4, 12-16, 19-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

Claim 2 is allowable over the prior art of record because none of the prior art of record teaches or fairly suggests a method and apparatus for storing data in a tape cartridge having a cartridge memory comprising the steps of: storing a cartridge stamp in the cartridge memory and determining if the cartridge stamp has been updated by performing a first reading and second reading of the cartridge stamp, then looking for a difference in the cartridge stamp between the first reading and the second reading.

Claim 4 is allowable over the prior art of record because none of the prior art of record teaches or fairly suggests a method and apparatus for storing data in a tape cartridge having a cartridge memory comprising the steps of: storing a cartridge stamp in the cartridge memory and determining if the cartridge stamp has been updated, then reading a set of label data in response to determining that the cartridge stamp has been updated.

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Claims 12-16 are allowable over the prior art of record because none of the prior art of record teaches or fairly suggests a method and apparatus for storing data in a tape cartridge having a cartridge memory comprising the steps of: storing a cartridge stamp in the cartridge memory and determining if the cartridge stamp has been updated by performing a first reading and second reading of the cartridge stamp, then looking for a difference in the cartridge stamp between the first reading and the second reading.

Claims 19-21 are allowable over the prior art of record because none of the prior art of record teaches or fairly suggests a method and apparatus for storing data in a tape cartridge having a cartridge memory comprising the steps of: storing a cartridge stamp in the cartridge memory and determining if the cartridge stamp has been updated by performing a first reading and second reading of the cartridge stamp, then looking for a difference in the cartridge stamp between the first reading and the second reading.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (formal communications, please mark

"EXPEDITED PROCEDURE")

Or:


(703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2021
Crystal Drive, Arlington. V.A., Sixth Floor (receptionist).

10. Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Fred Tzeng whose telephone number is 703-305-4841.
The examiner can normally be reached on weekdays from 9:30 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone
numbers for the organization where this application or proceeding is assigned are 703-
872-9306 for regular communications and 703-746-5710 for After Final
communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is 703-305-
3900.



Fred F. Tzeng
March 26, 2004